## Hole in Your Pocket

Grade Level(s):<br>Main Subject Area:<br>Related Subjects:<br>Duration of Lesson:<br>7-8<br>Personal Finance<br>Social Studies<br>45 minutes

## Description:

Students will learn the difference between saving and spending and small ways that everyday purchases add up.

## Keywords:

- Saving
- Spending
- Budget


## National Standards:

- Number and operations
- Problem solving
- Communication
- Connections


## Objectives:

- Students will investigate and calculate the costs of small, everyday purchases.
- Students will learn about the benefit of paying themselves first.


## Materials:

- "Hole in Your Pocket" Worksheet
- "How to Grow a \$Million" Handout


## Procedures:

Even if you earn money on a regular basis from an allowance or a job, it may feel as if your money just disappears - like you have a hole in your pocket. This can happen when you don't keep track of what you spend and make a special effort to save a portion of your earnings.

1. Begin this activity by asking students to identify items that people may purchase on a regular basis (daily or weekly).

Note: Ask students to generate a list before you refer to the chart provided.
2. Next list the average cost of each of the items.
3. Calculate the cost of purchasing one of the items on the list on a daily basis (e.g.- buying one soda ( $\$ .99$ each) per day $x$ seven days $=\$ 6.93$; daily for one month $=\$ 29.70$ )

Note: For additional impact, calculate the cost of the items including local sales tax (if applicable). Discuss the fact that small daily purchases add up.
4. Next, calculate the amount of money an individual would have if they saved that amount of money instead of spending it. Calculate the amount of savings over a week, month, and year.
5. Review the handout titled, "How to Grow a \$Million" and discuss how students have the potential to save a million dollars in their lifetime if they choose to save money rather than spend it.
6. Review a few basic savings tips:

- Save the change from purchases made.
- Pay yourself first: regardless of the amount of money earned, set aside a percentage of it in a savings account (experts recommend saving a minimum of $10 \%$ of your earnings).


## Assessment and Evaluation:

Ask students to complete the "Hole in Your Pocket" Worksheet associated with this lesson. The story problems will provide students an opportunity to practice calculating the costs of purchases commonly made by people their age. In addition, students will calculate the benefit of saving versus spending.

## Other Learning Opportunities:

- Provide students with local newspapers or sales fliers. Ask students to check for the items on their list to see if they are on sale. Students can then calculate the amount of money they would save if they waited to purchase the item on sale.
- Ask students to make a list of items they purchase on a regular basis and calculate the weekly and monthly totals of these purchases. Next, students can calculate the savings they would have at the end of one year if they put that same amount of money in a savings account that earned 3\% interest.


## HOW TO GROW A \$MILLION

| Starting Age | Daily Savings | Monthly Savings | Yearly Savings |
| :---: | :---: | :---: | :---: |
| 20 | $\$ 2.00$ | $\$ 61$ | $\$ 730$ |
| 25 | $\$ 3.57$ | $\$ 109$ | $\$ 1,304$ |
| 30 | $\$ 6.35$ | $\$ 193$ | $\$ 2,317$ |
| 35 | $\$ 11.35$ | $\$ 345$ | $\$ 4,144$ |
| 36 | $\$ 12.77$ | $\$ 388$ | $\$ 4,660$ |
| 37 | $\$ 14.37$ | $\$ 437$ | $\$ 5,244$ |
| 38 | $\$ 16.18$ | $\$ 492$ | $\$ 5,904$ |
| 39 | $\$ 18.22$ | $\$ 554$ | $\$ 6,652$ |
| 40 | $\$ 20.55$ | $\$ 625$ | $\$ 7,500$ |
| 41 | $\$ 23.19$ | $\$ 705$ | $\$ 8,463$ |
| 42 | $\$ 26.19$ | $\$ 797$ | $\$ 9,560$ |
| 43 | $\$ 29.62$ | $\$ 901$ | $\$ 10,811$ |
| 44 | $\$ 33.52$ | $\$ 1,020$ | $\$ 12,240$ |
| 45 | $\$ 38.02$ | $\$ 1,157$ | $\$ 13,879$ |
| 46 | $\$ 43.19$ | $\$ 1,314$ | $\$ 15,763$ |
| 47 | $\$ 49.14$ | $\$ 1,495$ | $\$ 17,937$ |
| 48 | $\$ 56.05$ | $\$ 1,705$ | $\$ 20,457$ |
| 49 | $\$ 64.08$ | $\$ 1,949$ | $\$ 23,390$ |
| 50 | $\$ 73.49$ | $\$ 2,235$ | $\$ 26,824$ |
| 51 | $\$ 84.58$ | $\$ 2,573$ | $\$ 30,971$ |
| 52 | $\$ 97.75$ | $\$ 2,973$ | $\$ 35,677$ |
| 53 | $\$ 113.53$ | $\$ 3,453$ | $\$ 41,437$ |
| 54 | $\$ 132.64$ | $\$ 4,035$ | $\$ 48,415$ |
| 55 | $\$ 156.12$ | $\$ 4,749$ | $\$ 56,984$ |

*Figures shown above represent the amount of money you would have to save at a $12 \%$ interest rate to accumulate $\$ 1,000,000$ by the time you reach 65 years of age.

Source: "The Wise Investor: Ten Concepts You Need to Know to Achieve Financial Success" by Neil Elmouch (Dunhill \& West Publishing).

## HOLE IN YOUR POCKET

Name: $\qquad$ Date: $\qquad$

Below is a list of items that are available for purchase at many corner shops and convenience stores. Use this list to calculate the cost of purchases made by characters in each of the story problems below.

| Item | Cost |
| :--- | :--- |
| Pack of gum | $\$ 1.09$ |
| Candy bar | $\$ .89$ |
| Soda | $\$ .99$ |
| Small bag of chips | $\$ 1.35$ |

Directions: Complete the problems below. For each case, add up the total cost of the items purchased. Next, calculate how much each individual would accumulate if they saved the money spent on these items for four weeks (approximately one month).

| Problem \#1 | Problem \#2 |
| :--- | :--- |
| Tim earns money each week helping with <br> chores around the house. He uses this money to <br> buy a few items for himself at the corner store. <br> This week he decided to buy a pack of gum <br> and a candy bar. How much did Tim spend this <br> week? | Sarah received money from her grandmother <br> for her birthday. She used this money to buy <br> herself a treat. This week she decided to buy <br> a soda and a candy bar. How much did Sarah <br> spend? |
| If Tim had saved that same amount of money <br> each week for four weeks, how much money <br> would he have? | If Sarah had saved that same amount of money <br> each week for four weeks, how much money <br> would she have? |

\(\left.$$
\begin{array}{|l|l|}\hline \text { Problem \#3 } & \text { Problem \#4 } \\
\text { Michael earns an allowance each week cleaning } \\
\text { up his grandfather's yard. Most weeks he } \\
\text { rewards himself for his hard work by purchasing } \\
\text { something at the convenience store. This week } \\
\text { he decided to buy a soda and a pack of chips. } \\
\text { How much did Michael spend this week? }\end{array}
$$ \quad \begin{array}{l}Kim earns money each week by walking her <br>
neighbor's dog. She got very thirsty walking <br>
the dog one hot day and used her earnings to <br>

buy two sodas. How much did Kim spend?\end{array}\right]\)|  |
| :--- |
| If Michael had rewarded himself by saving that <br> same amount of money each week for four <br> weeks, how much money would he have? |
| If Kim had saved that same amount of money <br> each week for four weeks, how much money <br> would she have? |

## HOLE IN YOUR POCKET: ANSWER KEY

## Name:

$\qquad$ Date: $\qquad$

Below is a list of items that are available for purchase at many corner shops and convenience stores. Use this list to calculate the cost of purchases made by characters in each of the story problems below.

| Item | Cost |
| :--- | :--- |
| Pack of gum | $\$ 1.09$ |
| Candy bar | $\$ .89$ |
| Soda | $\$ .99$ |
| Small bag of chips | $\$ 1.35$ |

Directions: Complete the problems below. For each case, add up the total cost of the items purchased. Next, calculate how much each individual would accumulate if they saved the money spent on these items for four weeks (approximately one month).

| Problem \#1 | Problem \#2 |
| :---: | :---: |
| Tim earns money each week helping with chores around the house. He uses this money to buy a few items for himself at the corner store. This week he decided to buy a pack of gum and a candy bar. How much did Tim spend this week? $\$ 1.98$ | Sarah received money from her grandmother for her birthday. She used this money to buy herself a treat. This week she decided to buy a soda and a candy bar. How much did Sarah spend? $\$ 1.88$ |
| If Tim had saved that same amount of money each week for four weeks, how much money would he have? $\$ 7.92$ | If Sarah had saved that same amount of money each week for four weeks, how much money would she have? $\$ 7.52$ |


| Problem \#3 | Problem \#4 |
| :--- | :--- |
| Michael earns an allowance each week cleaning <br> up his grandfather's yard. Most weeks he <br> rewards himself for his hard work by purchasing <br> something at the convenience store. This week <br> he decided to buy a soda and a pack of chips. <br> How much did Michael spend this week? | Kim earns money each week by walking her <br> neighbor's dog. She got very thirsty walking <br> the dog one hot day and used her earnings to <br> buy two sodas. How much did Kim spend? |
| $\qquad \$ 2.24$ |  |
| If Michael had rewarded himself by saving that <br> same amount of money each week for four <br> weeks, how much money would he have? | If Kim had saved that same amount of money <br> each week for four weeks, how much money <br> would she have? |
| \$9.36 | \$7.92 |

